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EXAMINER

BAYARD, DJENANE M

ART UNIT PAPER NUMBER

2141

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/634,116

Applicant(s)

JONES ET AL.

Examiner

Djenane M. Bayard

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-36 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 and 8-36 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This is in response to amendment filed on 8/11/05 in which claims 1-36 are pending.

#### *Response to Arguments*

2. As per claims 1-10 and 13-30, Applicant argues that RFC 2516 fails to disclose a tag included in a PADI packet. However, RFC 2516 clearly teaches *wherein the PPPoE active discovery initiation (PADI) and the (PADR) packet can include a "Host Uniq tag. This Tag is used by host to uniquely associate an Access Concentrator response (PADO or PADS) to a particular Host request (PADI or PADR). This Tag\_Value is binary data of any value and length the host chooses... The host may include a Host\_Uniq TAG in a PADI or PADR* (See page 8, section Host\_uniq). As per applicant's own specification, "the tag is a host\_uniq tag" (See publication, paragraph [0036]).

Applicant argues that Ikawata fails to teach "the use of Ethernet or PPPoE packets for communication between the host and client machines". However, Applicant is reminded that Ethernet or PPPoE packets are arbitrary method of Communication between host and client machines. Ikawata clearly teaches "the host and client machines are connected with each other via a communication line or the like" (See page 5, paragraph [0083]). Furthermore, Applicant argues that Ikawata fails to teach the use of a tag in a discovery packet that uniquely identifies a product model associated a communications device. RFC 2516 was used as mentioned above to teach the use of Tag to identify an element unique to a host ( Host\_uniq tag). It would have obvious to one with ordinary skill in the art to combine the Host\_uniq Tag as taught by RFC 2516 with the transmission of the product Identification Information (PII) of Ikawata in order to provide a customer information control system for obtaining customer information of electronic

equipment for preventing input error or false value entry of product identification information  
(See page 1, paragraph [0002]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 13-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2516 in view of U.S. Patent Application No. 2002/0095299 to Iwakata.

a. As per claim 1, RFC 2516 teaches a method for transmitting PPP over Ethernet. Furthermore, RFC 2516 teaches generating a device identifier code that specifically identifies a product model of a customer premises equipment device in response to receiving a point-to-point over Ethernet (PPPoE) packet communicated over the distributed network (See page 3 and 4, section 4 and 5); broadcasting a point-to-point over Ethernet (PPPoE) active discovery initiation (PADI) packet (See page 4 and 5, section 5.1 *The host sends the PADI packet with Destination\_Addr set to the broadcast address*); receiving a point-to-point over Ethernet (PPPoE) active discovery offer (PADO) packet (See page 5, section 5.2, *when the Access Concentrator receives a PADI that it can serve, it replies by sending a PADO packet*); transmitting a point-to-point over Ethernet (PPPoE) active discovery request (PADR) packet in

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response to receiving the PADO packet (See page 5, section, 5.3, *The Host sends one PADR packet to the access concentrator that it has chosen*); receiving a point-to-point over Ethernet (PPPoE) active discovery session (PADS packet (See page 5, section 5.4, *the Access concentrator replies to the host with a PADS packet*); and conducting an Ethernet communication session. Furthermore, RFC 2516 teaches wherein the (PADI) and the (PADR) packets include a TAG of TAG\_Type Service Name, indicating the service the host is requesting, and any number of other Tag types. RFC 2516 teaches *wherein the PPPoE active discovery initiation (PADI) and the (PADR) packet can include a "Host Uniq tag. This Tag is used by host to uniquely associate an Access Concentrator response (PADO or PADS) to a particular Host request (PADI or PADR). This Tag\_Value is binary data of any value and length the host chooses... The host may include a Host\_Uniq TAG in a PADI or PADR* (See page 8, section Host\_uniq). Furthermore, RFC 2516 teaches a *"vendor\_specific tag that is used to pass vendor proprietary information"* (See page 8, section vendor\_specific). RFC 2516 does not specifically teaches a tag that identifies a product model of a customer premises equipment device.

However, Iwakata teaches a customer information control system and customer information control method of electronic equipment. Furthermore, Iwakata teaches wherein the product identification information PII stored in the product identification information storing unit is the control information for identifying the individual products. For example, the product identification information PII includes the product model number, manufacturer's serial number, and the like which are provided in advance (at the shipment) in order to identify each client machine.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device as taught by Ikawata in the teaching of the RFC 2516 in order to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

b. As per claim 6, RFC 2516 teaches RFC 2516 teaches wherein the (PADI) and the (PADR) packets include a TAG of TAG\_Type Service Name, indicating the service the host is requesting, and any number of other Tag types. RFC 2516 teaches wherein the (PADI) and the (PADR) packets include a TAG of TAG\_Type Service Name, indicating the service the host is requesting, and any number of other Tag types. RFC 2516 teaches *wherein the PPPoE active discovery initiation (PADI) and the (PADR) packet can include a "Host Uniq tag. This Tag is used by host to uniquely associate an Access Concentrator response (PADO or PADS) to a particular Host request (PADI or PADR). This Tag\_Value is binary data of any value and length the host chooses... The host may include a Host\_Uniq TAG in a PADI or PADR* (See page 8, section Host\_uniq). Furthermore, RFC 2516 teaches a *"vendor\_specific tag that is used to pass vendor proprietary information"* (See page 8, section vendor\_specific). However, RFC 2516 failed to specify wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device and generating a device identifier code based on the tag in response to receiving the PPPoE active discovery packet.

Iwakata teaches a customer information control system and customer information control method of electronic equipment. Furthermore, Iwakata teaches wherein the product identification information PII stored in the product identification information storing unit is the control information for identifying the individual products. For example, the product identification information PII includes the product model number, manufacturer's serial number, and the like which are provided in advance (at the shipment) in order to identify each client machine. Furthermore, Iwakata teaches wherein the customer information registration unit stores the personal information and the product identification information included in the customer management information into the customer information database (See page 5, paragraph 0090)

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device as taught by Ikawata in the teaching of the RFC 2516 in order to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

c. As per claims 16, 21 and 24, RFC 2516 teaches receiving a point-to-point over Ethernet (PPPoE) active discovery packet, wherein the PPPoE active discovery packet. However, RFC failed to teach wherein includes a tag that identifies a product model of a customer premises equipment device; and determining the product model of the customer premises equipment device based on the tag.

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Iwakata teaches Iwakata teaches a customer information control system and customer information control method of electronic equipment. Furthermore, Iwakata teaches wherein the product identification information PII stored in the product identification information storing unit is the control information for identifying the individual products. For example, the product identification information PII includes the product model number, manufacturer's serial number, and the like which are provided in advance (at the shipment) in order to identify each client machine.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device as taught by Ikawata in the teaching of the RFC 2516 in order to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

d. As per claims 2, 8 and 23, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the host can attach a host\_uniq tag to any (PADI) or (PADR) packets (See page8, section HOST\_uniq).

e. As per claim 3, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the device identifier code can be of any value and length that the host chooses (See page 8, section Host\_uniq).



f. As per claim 4, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the customer premises equipment is a device that terminates PPPoE communications (See page 5, section 5.5).

g. As per claim 5, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 failed to teach receiving a point-to-point over Ethernet (PPPoE) active discovery packet that includes the tag and storing a device identifier code that identifies the product model in a database.

Ikawata teaches receiving a point-to-point over Ethernet (PPPoE) active discovery packet that includes the tag and storing a device identifier code that identifies the product model in a database (page 4, paragraph [0079]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate receiving a point-to-point over Ethernet (PPPoE) active discovery packet that includes the tag and storing a device identifier code that identifies the product model in a database as taught by Ikawata in the teaching of RFC 2516 to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

h. As per claim 7, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches generating a device identifier code in response to receiving the PPPoE active discovery packet (See page 3, section 5).

i. As per claims 9 and 19, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the PPPoE active discovery packet is a PPPoE active discovery initiation (PADI) packet (See page 4, section 5.1).

j. As per claims 10 and 20, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the PPPoE active discovery packet is a PPPoE active discovery request (PADR) packet (See page 5, section 5.3).

k. As per claim 13, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches receiving a PPPoE active discovery packet (See page 4, section 5.2)

l. As per claim 14, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the PPPoE active discovery packet received is a PPPoE active discovery offer (PADO) packet (See page 5, section 5.2).

m. As per claim 15, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the PPPoE active discovery packet received is a PPPoE active discovery session (PADS) packet (See page 5, section 5.3).

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n. As per claim 17, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 failed to teach wherein the step of determining further comprises storing the product model of the customer premises equipment device in a database.

Ikawata teaches wherein the step of determining further comprises storing the product model of the customer premises equipment device in a database (See page 4, paragraph [0079]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the step of determining further comprises storing the product model of the customer premises equipment device in a database as taught by Ikawata in the teaching of RFC 2516 in order to store the product identification information and the personal information included in the customer management information sent from the client machine (See page 4, paragraph [0079])

o. As per claim 18, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 failed to teach managing the database based upon the product model of the customer premises equipment device.

Ikawata teaches managing the database based upon the product model of the customer premises equipment device (See page 4, paragraph [0079]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate managing the database based upon the product model of the customer premises equipment device as taught by Ikawata in the teaching of RFC 2516 in order to store the product identification information and the personal information included in the customer management information sent from the client machine (See page 4, paragraph [0079]).

p. As per claim 22, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the device identifier field comprises a predefined binary number (See page 8, section host\_uniq).

q. As per claim 25, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the point-to-point connection is a point-to-point over Ethernet (PPPoE) connection (See page 2, section introduction).

r. As per claim 26, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the access concentrator is a broadband remote access server (See page 2, section introduction)

s. As per claim 27, RFC 2516 teaches a data packet for use in a distributed network, the data packet comprising: an Ethertype payload field including a host-uniq tag. However, RFC 2516 failed to teach wherein the value indicating a model type of a digital switching device.

Ikawata teaches Iwakata teaches Iwakata teaches a customer information control system and customer information control method of electronic equipment. Furthermore, Iwakata teaches wherein the product identification information PII stored in the product identification information storing unit is the control information for identifying the individual products. For example, the product identification information PII includes the product model number,

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manufacturer's serial number, and the like which are provided in advance (at the shipment) in order to identify each client machine.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the PPPoE active discovery initiation (PADI) packet includes a tag that specifically identifies a product model of a customer premises equipment device as taught by Ikawata in the teaching of the RFC 2516 in order to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

t. As per claim 28, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches a service provider destination address, the service provider destination address associated with a destination node within the distributed network (See page 3, section 4; and a service provider source address, the service provider source address associated with a storage device at a source node within the distributed network (See page 3, section 4).

u As per claim 29, RFC 2516 in view of Ikawata teaches the claimed invention as described above. Furthermore, RFC 2516 teaches wherein the distributed network is an Ethernet distributed network (See pages 1 and 2, section applicability and introduction).

v. As per claim 30, RFC 2516 teaches the claimed invention as described above. However, RFC 2516 failed to teach wherein the model type of the digital switching device is a nine bit

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binary device identifier code associated with customer premises equipment.

Ikawata teaches wherein the model type of the digital switching device is a nine bit binary device identifier code associated with customer premises equipment.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the model type of the digital switching device is a nine bit binary device identifier code associated with customer premises equipment as taught by Ikawata in the teaching of RFC 2516 in order to provide a customer information control system for obtaining customer information of electronic equipment for preventing input error or false value entry of product identification information (See page 1, paragraph [0002]).

5. Claims 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2516 in view of U.S. Patent Application No. 2002/0095299 to Iwakata as applied to claim 1 above, and further in view of U.S. Application No. 2003/0053443 to Owens.

a. As per claim 31, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the Ethernet communication session is conducted via an IP network.

Owens teaches wherein the Ethernet communication session is conducted via a distributed IP network (See page 4, paragraph [0057])

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the Ethernet communication session is conducted via a distributed IP network as taught by Owens in the invention of RFC 2516 in view of Ikawata in

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order to aggregate thousands of subscribers onto one platform and apply customized IP services to those subscribers (See page 4, paragraph [0057]).

b. As per claim 32, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the Ethernet communication session is conducted via a digital subscriber line (DSL) connection.

Owens teaches wherein the Ethernet communication session is conducted via a digital subscriber line (DSL) connection (See page 4, paragraph [0053]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the Ethernet communication session is conducted via a digital subscriber line (DSL) connection as taught by Owens in the claimed invention of RFC 2516 in view of Ikawata in order to provide always on connection (See page 4, paragraph [0053]).

c. As per claim 33, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the point-to-point over Ethernet active discovery packet is received from a broadband remote access server.

Owens teaches wherein the point-to-point over Ethernet active discovery packet is received from a broadband remote access server (See page 4, paragraph [0056]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the point-to-point over Ethernet active discovery packet is received from a broadband remote access server as taught by Owens in the claimed invention of

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RFC 2516 in view of Ikawata in order to connect numerous Broadband service nodes of an ISP  
(See page 4, paragraph [0056]).

d. As per claim 34, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the Ethernet communication session is conducted via an asynchronous transfer mode (ATM) connection.

Owens teaches wherein the Ethernet communication session is conducted via an asynchronous transfer mode (ATM) connection (See page 4, paragraph [0056]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the Ethernet communication session is conducted via an asynchronous transfer mode (ATM) connection in order to provide connection to the Broadband remote access server (BRAS) (See page 4, paragraph [0056]).

e. As per claim 35, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the communication session is conducted via an asymmetric digital line (ADSL) connection

Owens teaches wherein the communication session is conducted via an asymmetric digital line (ADSL) connection (See page 4, paragraph [0053]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the communication session is conducted via an asymmetric digital line (ADSL) connection as taught by Owens in the claimed invention of RFC



2516 in view of Ikawata in order to provide always on connection (See page 4, paragraph [0053]).

6. Claims 11-12 and 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2516 in view of U.S. Patent Application No. 2002/0095299 to Iwakata as applied to claim 6 above, and further in view of U.S. Application No. 2003/0053443 to Owens.

As per claim 36, RFC 2516 in view of Ikawata teaches the claimed invention as described above. However, RFC 2516 in view of Ikawata failed to teach wherein the CPE is an ADSL router.

Koo teaches wherein the CPE is an ADSL router (See page 2, paragraph [0023])

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate wherein the CPE is an ADSL router in order to connect the user terminals over the Internet (See page 2, paragraph [0023]).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application No. 2005/0246426 to Motoyama et al teaches a unique identification method for remote diagnostics, maintenance and control system over SNMP.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878.

The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Djenane Bayard

Patent Examiner

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER